

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
FEE RECORD SHEET

Variable	Mean	SD	Min	Max
Age	35.5	10.5	20	65
Gender	0.5	0.5	0	1
Marital status	0.5	0.5	0	1
Education	12.5	1.5	9	16
Income	3500	1500	1000	8000
Health status	0.5	0.5	0	1
Smoking status	0.3	0.5	0	1
Alcohol consumption	0.2	0.4	0	1
Exercise frequency	0.5	0.5	0	1
Stress level	0.5	0.5	0	1
Sleep quality	0.5	0.5	0	1
Work satisfaction	0.5	0.5	0	1
Life satisfaction	0.5	0.5	0	1
Depression score	0.5	0.5	0	1
Anxiety score	0.5	0.5	0	1
Overall health score	0.5	0.5	0	1

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01 FC:201 345.00 0P
02 FC:202 39.00 0P

ABSTRACT OF THE DISCLOSURE

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5 A customer-use terminal unit 20 managed by a customer transmits exchange instructing information, which instructs an exchange of valuable points obtained by the customer for communication points used for receiving on-line services, to a central unit 10 that manages the communication points (S202). The central unit 10 transmits valuable point request information according to the received exchange

10 instructing information to a cooperate-use terminal unit 30 that manages the valuable points (S204). The cooperate-use terminal unit 30 transmits valuable points corresponding to the received valuable point request information to the central unit 10 (S206). The central unit 10 exchanges the

15 received valuable points for communication points according to a predetermined exchange rate (S209). Accordingly, it is possible to achieve point management capable of reducing the loss of valuable points given to the customer as a reward for consumption activity, due to the expiration of the term

20 of validity of the valuable points, and improving the frequency in use of on-line services.

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TITLE OF THE INVENTION

~~POINT MANAGING METHOD, POINT MANAGING SYSTEM,~~
~~CENTRAL UNIT AND RECORDING MEDIUM~~

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BACKGROUND OF THE INVENTION

The present invention relates to a point managing method for managing various points such as communication points used for receiving on-line services, a point managing system that employs the method, a central unit for use in the system, and a recording medium on which a program for realizing the device is recorded.

With the development of communication networks such as the Internet, businesses that provide various services, such as giving communication points used for charged or free on-line services to customers and providing on-line games and on-line shopping according to the given points, have been increasing.

Moreover, various service providers and various retail shops, which give valuable points as rewards for using transportation facilities, such as an air line, and for consumption activity, such as purchasing products, and provide various products and services in exchange for the valuable points when the amount of given valuable points reaches a predetermined value, are popularized.

However, when the amount of points given as a reward

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for consumption activity does not reach the predetermined value that gives a chance to exchange the points for products and services, these points are useless and the term of validity of the points sometimes expires before
5 exchanging the points for products and services.

Since the services of giving valuable points as a reward for consumption activity are provided by many service providers and retail shops, there is a circumstance that the consumers have difficulty in remembering which service
10 providers and retail shops they use as customers (members). In such a circumstance, there is a possibility that the expiry date of the valuable points passes before the consumers notice the given valuable points.

Furthermore, there is such a problem that the service
15 providers and retail shops have disadvantages from the viewpoint of the taxation system because the valuable points that are not exchanged for products and services are counted as profits on the account books.

Besides, there are objectives to be achieved by a
20 business entity which provides various services according to communication points that the number of customers must be increased and the frequency in use of services must be improved.

25 BRIEF SUMMARY OF THE INVENTION

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5 The present invention has been made in view of the
above circumstances, and a main object of the present
invention is to provide a point managing system which
enables a customer to effectively use valuable points
without considering the term of validity by exchanging the
valuable points for communication points by a preset
exchange rate according to an instruction from the customer,
enables a business entity that provides various services in
exchange for communication points to obtain new customers
10 and achieve an improvement in the frequency in use of
services, and prevents service providers and retail shops
that manage the valuable points from having disadvantages
from the viewpoint of the taxation system; a point managing
system employing the method; a central unit for use in the
15 system; and a recording medium on which a program for
realizing the device is recorded.

Another object is to provide a point managing method,
point managing system, central unit and recording medium
capable of confirming the status of obtained valuable points
20 and exchanging the valuable points for communication points
by transmitting identification information such as a
membership number given from a business entity who provides
valuable points to a central unit managed by a service
provider who manages communication points, and thereby
25 unitarily managing the valuable points so that valuable

points do not fall into oblivion.

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5 A point managing method according to the first invention, which is a method for managing points among a first business entity, a second business entity who
10 cooperates with the first business entity and customers of the first and second business entities, the first business entity managing communication points used for on-line services, the second business entity managing valuable points given to customers as a reward for consumption activity, the method comprising the steps of: instructing
15 the first business entity by the customer to exchange valuable points for communication points; requesting the second business entity by the first business entity to send valuable points given to the customer, according to the instruction; sending requested valuable points by the second
20 business entity to the first business entity; and exchanging received valuable points for communication points by the first business entity, according to a preset exchange rate.

25 The point managing method according to the first invention enables the customer to extend the substantial term of validity of valuable points whose expiry date is approaching by exchanging the valuable points for communication points by a preset exchange rate according to the instruction from the customer and enables the customer to effectively use various valuable points of small values

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which are useless as individuals by adding up these valuable points for a single communication point, thereby accelerating the spread of communication points. Hence, the first business entity can obtain new customers and achieve
5 an improvement in the frequency in use of services.

Moreover, by introducing a business mode in which the charge of services calculated according to the exchange rate is paid from the second business entity to the first business entity, the second business entity can limit profits derived
10 from the expiration of the term of validity of valuable points on an account book and consequently can never have disadvantages from the viewpoint of the taxation system.

A point managing system according to the second invention, which is a point managing system comprising a
15 central unit for managing communication points used for on-line services, a cooperate-use terminal unit that is connected to the central unit and manages valuable points representing a reward for consumption activity, and a customer-use terminal unit that is connected to the central
20 unit, wherein the customer-use terminal unit comprises a controller capable of performing the operation of transmitting to the central unit exchange instructing information instructing an exchange of valuable points for communication points, the central unit comprises: a
25 communication point database that records information

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related to communication points; an exchange database that
records information related to an exchange rate between
communication points and valuable points; and a controller
capable of performing the operation of transmitting to the
5 cooperate-use terminal unit valuable point request
information requesting valuable points corresponding to the
customer-use terminal unit according to received exchange
instructing information; and the cooperate-use terminal unit
comprises: a valuable point database that records
10 information related to valuable points; a controller capable
of performing the following operations: transmitting to the
central unit valuable points corresponding to received
valuable point request information; and updating the
valuable point database according to the transmitted
15 valuable points; and the controller of the central unit
further capable of performing following operations:
exchanging received valuable points for communication points
according to an exchange rate recorded in the exchange
database; and updating the communication point database
20 according to the exchanged communication points.

The point managing system according to the second
invention enables the customer to extend the substantial
term of validity of valuable points whose expiry date is
approaching by exchanging the valuable points for
25 communication points by a preset exchange rate according to

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the exchange instructing information received from the
customer-use terminal unit and enables the customer to
effectively use various valuable points of small values
which are useless as individuals by adding up these valuable
5 points for a single communication point, thereby
accelerating the spread of communication points. Hence, the
first business entity who manages the central unit can
obtain new customers and achieve an improvement in the
frequency in use of services. Moreover, by introducing a
10 business mode in which the charge of services calculated
according to the exchange rate is paid to the first business
entity from the second business entity who manages the
cooperate-use terminal unit, the second business entity can
limit profits derived from the expiration of the term of
15 validity of valuable points on an account book and
consequently can never have disadvantages from the viewpoint
of the taxation system.

A point managing system according to the third
invention is characterized in the system of the second
20 invention that: the controller of the customer-use terminal
unit further capable of performing following operations:
accepting input of first identification information related
to customers and second identification information that is
different from the first identification information; and
25 transmitting the first and second identification information

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to the central unit; the controller of the central unit further capable of performing the following operations: authenticating the customer-use terminal unit based on received first identification information; and transmitting
5 received second identification information to the cooperate-use terminal unit; the valuable point database provided in the cooperate-use terminal unit stores valuable points recorded to correspond to the second identification information, and the controller of the cooperate-use
10 terminal unit further capable of performing the operation of extracting from the valuable point database valuable points to be transmitted to the central unit, according to received second identification information.

In the point managing system according to the third
15 invention, by performing authentication based on the first identification information such as an ID number and a password given to a customer from the first business entity to ensure safety and then transmitting to the central unit the second identification information such as a membership
20 number given to the customer from the second business entity, it is possible to confirm the status of obtained valuable points corresponding to the second identification information and exchange the valuable points for communication points. It is therefore possible to unitarily
25 manage the valuable points through the central unit, improve

the convenience of the customer, and prevent the valuable points from falling into oblivion.

5 A central unit according to the fourth invention, which is connected to a cooperate-use terminal unit for managing valuable points representing a reward for consumption activity and a customer-use terminal unit, for managing communication points used for on-line services, comprising: a communication point database that records information related to communication points; an exchange
10 database that records information related to an exchange rate between communication points and valuable points; and a controller, coupled to the communication point database and said exchange database, and capable of performing the following operations: when exchange instructing information
15 instructing an exchange of valuable points for communication points is received, for transmitting to the cooperate-use terminal unit valuable point request information requesting valuable points corresponding to the customer-use terminal unit according to the received exchange instructing
20 information; when valuable points corresponding to the transmitted valuable point information are received, for exchanging the received valuable points for communication points according to an exchange rate recorded in the exchange database; and updating the communication point
25 database according to the exchanged communication points.

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The central unit according to the fourth invention enables the customer to extend the substantial term of validity of valuable points whose expiry date is approaching by exchanging valuable points for communication points by a
5 preset exchange rate according to the exchange instructing information received from the customer-use terminal unit and enables the customer to effectively use various valuable points of small values which are useless as individuals by adding up these valuable points for a single communication
10 point, thereby accelerating the spread of communication points. Hence, the first business entity who manages the central unit can obtain new customers and achieve an improvement in the frequency in use of services. Moreover, by introducing a business mode in which the charge of
15 services calculated according to the exchange rate is paid to the first business entity from the second business entity who manages the cooperate-use terminal unit, the second business entity can limit profits derived from the expiration of the term of validity of valuable points on an
20 account book and consequently can never have disadvantages from the viewpoint of the taxation system.

A computer readable recording medium according to the fifth invention, which is a computer readable recording medium including thereon a recorded computer program for
25 causing a computer having communication means to manage

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communication points used for on-line services, comprising:
computer readable program code means, when exchange
instructing information instructing an exchange of valuable
points representing a reward for consumption activity for
5 communication points is received, for causing a computer to
transmit valuable point request information requesting
valuable points to the communication means corresponding to
the requested valuable points, according to the exchange
instructing information; and computer readable program code
10 means, when valuable points corresponding to the transmitted
valuable point request information are received, for causing
a computer to exchange the received valuable points for
communication points according to a preset exchange rate.

The computer readable recording medium according to
15 the fifth invention can extend the substantial term of
validity of valuable points whose expiry date is approaching
by exchanging the valuable points for communication points
by a preset exchange rate according to the exchange
instructing information by the execution of the recorded
20 program on the computer, and enables an effective use of
various valuable points of small values which are useless as
individuals by adding up these valuable points for a single
communication point, thereby accelerating the spread of
communication points. Hence, the first business entity who
25 manages the central unit can obtain new customers and

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achieve an improvement in the frequency in use of services. Moreover, by introducing a business mode in which the charge of services calculated according to the exchange rate is paid to the first business entity from the second business
5 entity who manages the communication device, the second business entity can limit profits derived from the expiration of the term of validity of valuable points on an account book and consequently can never have disadvantages from the viewpoint of the taxation system.

10 The above and further objects and features of the invention will more fully be apparent from the following detailed description with accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

15 FIG. 1 is an explanatory view showing the concept of a point managing system of the present invention;

FIG. 2 is a block diagram showing the structure of the point managing system of the present invention;

20 FIG. 3 is a conceptual view showing the recorded contents of a communication point database provided in a central unit of the present invention;

FIG. 4 is a conceptual view showing the recorded contents of an exchange database provided in the central unit of the present invention;

25 FIG. 5 is a conceptual view showing the recorded

contents of a customer information database provided in the central unit of the present invention;

FIG. 6 is a conceptual view showing the recorded contents of a valuable point database provided in a
5 cooperate-use terminal unit for use in the point managing system of the present invention;

FIG. 7A and FIG. 7B are flow charts showing a valuable point confirmation process performed by the central unit, customer-use terminal unit and cooperate-use terminal
10 unit for use in the point managing system of the present invention;

FIG. 8A and FIG. 8B are flow charts showing a communication point exchange process performed by the central unit, customer-use terminal unit and cooperate-use
15 terminal unit for use in the point managing system of the present invention; and

FIG. 9 is an explanatory view showing a Web page outputted from the customer-use terminal unit for use in a point managing system of the present invention.
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DETAILED DESCRIPTION OF THE INVENTION

The following description will explain the present invention with reference to the drawings illustrating an embodiment thereof.

25 FIG. 1 is an explanatory view showing the concept of

a point managing system of the present invention, and FIG. 2 is a block diagram showing the structure of the point managing system of the present invention.

5 In the drawings, numeral 10 denotes a central unit of the present invention using a WWW server computer. The central unit 10 is managed by a first business entity 100 that provides on-line services such as on-line shopping and on-line games performed on a communication network 400 such as the Internet.

10 For the on-line services, communication points are used as virtual money which can be used only on the communication network 400. The communication points are given for pay or free of charge from the first business entity 100 to customers 200 as the members using the on-line
15 services, and managed by the central unit 10.

The customers 200 are connected to the communication network 400 through customer-use terminal units 20 such as personal computers, and also have a membership to point services provided by various second business entities 300
20 that serve valuable points which are exchangeable for various products and services as a reward for consumption activity such as the use of transportation facilities including an air line and purchasing of products in addition to on-line services.

25 The first business entity 100 and second business

entities 300 made a business cooperation contract with each other, and the second business entities 300 are connected to the communication network 400 through cooperate-use terminal units 30.

5 The central unit 10 includes an auxiliary storage device 12 such as a CD-ROM drive for reading information including programs and data from a recording medium 40 such as a CD-ROM on which information including programs and data for the central unit 10 of the present invention is
10 recorded, and a recording device 13 such as a hard disk for recording thereon the information including programs and data read by the auxiliary storage device 12.

 By reading the information including programs and data from the recording device 13, storing the information
15 in a RAM 14 for storing information and executing the information by a CPU 11, the WWW server computer is operated as the central unit 10 of the present invention.

 Additionally, parts of a recording area of the recording device 13 is allotted as a communication point
20 database 101 that records information related to communication points, an exchange database 102 that records information related to an exchange rate of communication points and various valuable exchange points managed by the second business entities 300, and a customer information
25 database 103 that records information related to the

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customers 200. Furthermore, Web pages described in program languages such as HTML (Hyper Text Markup Language) are recorded.

5 In addition, the central unit 10 includes an input device 15 such as a mouse and a keyboard, an output device 16 such as a monitor and a printer, and a communication device 17 that is connected to the communication network 400 to send and receive information to/from other devices.

10 FIG. 3 is a conceptual view showing the recorded contents of the communication point database 101 provided in the central unit 10 of the present invention. In the communication point database 101, information related to the communication points is stored as a record including data of items such as a customer ID that identifies the customer 200 and communication points given to the customer 200.

15 FIG. 4 is a conceptual view showing the recorded contents of the exchange database 102 provided in the central unit 10 of the present invention. In the exchange database 102, data indicating the exchange rates between the valuable exchange points and the communication points managed by the respective second business entities 300 are recorded in the items showing the names of the respective second business entities 300 (or the common names of provided services).

25 Incidentally, the recorded exchange rates are values

set according to the contents of the contracts made between the first business entity 100 and the respective second business entities 300.

FIG. 5 is a conceptual view showing the recorded contents of the customer information database 103 provided in the central unit 10 of the present invention. In the customer information database 103, the information related to a customer 200 is stored as a record including data in the items such as personal information including the name, date of birth, sex distinction and address of the customer 200, and the first identification information including the ID number and password that identify the customer 200.

The customer-use terminal unit 20 has substantially the same structure as the central unit 10, and includes a CPU 21, a recording device 22, a RAM 23, an input device 24, an output device 25, and a communication device 26. In the recording device 22, information including various programs, such as a browsing software program (hereinafter referred to as the browser) for browsing Web pages, and data is recorded. By activating the browser and inputting a URL (Uniform Resource Locator) specifying a Web page recorded in the central unit 10 in a predetermined area displayed on the output device 25, it is possible to access the Web page recorded in the central unit 10.

The cooperate-use terminal unit 30 has substantially

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the same structure as the central unit 10, and includes a CPU 31, a recording device 32, a RAM 33, an input device 34, an output device 35, and a communication device 36. A part of the recording area of the recording device 32 is allotted
5 as a valuable point database 301 that records information related to valuable points.

FIG. 6 is a conceptual view showing the recorded contents of the valuable point database 301 provided in the cooperate-use terminal unit 30 for use in the point managing
10 system of the present invention. In the valuable point database 301, information related to valuable points is stored as a record having data in the items such as second identification information including a membership number given to a customer by the second business entity 300 and
15 valuable points given to the customer 200 as a reward for consumption activity.

Next, referring to the flow charts of FIG. 7A and FIG. 7B showing a valuable point authentication process performed by the central unit 10, customer-use terminal unit
20 20 and cooperate-use terminal unit 30 for use in the point managing system of the present invention.

The customer 200 accesses a Web page recorded in the central unit 10 by connecting the customer-use terminal unit 20 to the communication network 400, activating the browser,
25 and inputting the URL.

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Then, the customer 200 inputs the first identification information in a predetermined space on the outputted Web page, and inputs the second identification information in a predetermined space of a section indicating
5 a second business entity 300 that confirms the status of obtained points and manages valuable exchange points desired to be exchanged for communication points.

The terminal unit 20 accepts the input of the first and second identification information (S101), and transmits
10 the accepted first and second identification information to the central unit 10 (S102).

The central unit 10 receives the first and second identification information (S103), and performs authentication by collating the received first
15 identification information and the first identification information recorded in the customer information database 103 (S104).

By performing the authentication process in such a manner, the customer 200 can use the point exchange system
20 of the present invention. Moreover, when it is confirmed that the first identification information is wrong as a result of the collation, the central unit 10 performs a predetermined abnormal process to request the customer 200 to input the first identification information again.

25 Then, the central unit 10 transmits the received

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second identification information to a cooperate-use terminal unit 30 corresponding to the second identification information (S105).

5 The cooperate-use terminal unit 30 receives the second identification information (S106), extracts valuable points corresponding to the second identification information from the valuable point database 301 according to the received second identification information (S107), and transmits valuable point information indicating the value of the extracted valuable points to the central unit 10 (S108).

10 In the cooperate-use terminal unit 30, in the event of confirming and exchanging the valuable points, when personal information such as the name and date of birth of the customer 200 is required in addition to the second identification information, the personal information recorded in the customer information database 103 is automatically transmitted from the central unit 10 to the cooperate-use terminal unit 30. Therefore, the customer 200 can confirm and exchange the valuable exchange points by only inputting the second identification information.

15 The central unit 10 receives the valuable point information (S109), calculates communication point information indicating a value of communication points exchanged for valuable points from a value indicated by the

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received valuable point information according to an exchange
rate recorded in the exchange database 102 (S110), and
transmits the calculated communication point information and
valuable point information to the customer-use terminal unit
5 20 (S111).

The customer-use terminal unit 20 receives the
communication point information and valuable point
information (S112), and outputs the value of the
communication points indicated by the received communication
10 point information and the value of the valuable points
indicated by the received valuable point information (S113).

Next, referring to the flow charts shown in FIG. 8A
and FIG. 8B, the following description will explain a
communication point exchange process performed by the
15 central unit 10, customer-use terminal unit 20 and
cooperate-use terminal unit 30 for use in the point managing
system of the present invention.

The customer 200 confirms the values of the
communication points and valuable points outputted in step
20 S113, and inputs an exchange instruction when the exchange
of the valuable points for the communication points is
desired.

The customer-use terminal unit 20 accepts the input
of the exchange instruction (S201), and transmits exchange
25 instructing information showing the accepted exchange

instruction to the central unit (S202).

The central unit 10 receives the exchange instructing information (S203), and transmits valuable point request information requesting valuable points to the cooperate-use terminal unit 30 according to the received exchange instructing information (S204).

The cooperate-use terminal unit 30 receives the valuable point request information (S205), transmits valuable points corresponding to the received valuable point request information to the central unit 10 (S206), and updates the valuable point database 301 according to the transmitted valuable points (S207).

Incidentally, it has been described that the valuable points are transmitted in step S206. In this step, the cooperate-use terminal unit 30 performs the process of transmitting the valuable point information indicating the value of the valuable points in the same manner as in step S108.

The central unit 10 receives the valuable points (S208), exchange the received valuable points for communication points according to the exchange rate recorded in the exchange database 102 (S209), updates the communication point database 101 according to the exchanged communication points (S210), and transmits the communication point information indicating the value of the exchanged

communication points to the customer-use terminal unit 20 (S211).

5 The customer-use terminal unit 20 receives the communication point information (S212), and outputs the received communication point information and exchange complete information indicating the completion of the exchange (S213).

10 Besides, when the customer 200 exchanges the valuable points for communication points, a settlement process is performed. In the settlement process, the second business entity 200 pays the first business entity 100 the charge for using services which is calculated based on the exchanged valuable points and the exchange rate.

15 FIG. 9 is an explanatory view showing a Web page outputted from the customer-use terminal unit 20 for use in the point managing system of the present invention. As shown in FIG. 9, spaces for inputting an ID number and a password as the first identification information are displayed in the upper part of the screen outputted as a Web page. Moreover, in spaces indicating the second business entities 300 located below the spaces for the first identification information, the items showing the names of the second business entities 300 (or the common names of provided services), the membership number indicating the second identification information, valuable points, check

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buttons for specifying whether exchanging is carried out and communication points are provided for the output or input of the respective data. In further lower positions, a box for outputting the total amount of communication points and an
5 information transmission button are displayed.

The customer 200 inputs data in the items that present the second identification information corresponding to valuable points which are to be confirmed and/or desired to be exchanged, checks "Yes" in the check button indicating
10 whether exchanging is carried out by the use of the input device (mouse) 15, and clicks the lower information transmission button located in a lower position so as to execute the input of the exchange instruction.

In this case, instead of exchanging all the valuable
15 points, part of the obtained valuable points may be exchanged by inputting a desired value.

Moreover, in the item showing the valuable points and the item showing the communication points, the value of the valuable points indicated by the received valuable point
20 information and the value of the communication points indicated by the received communication point information are outputted, and a value indicating the total amount of communication points is outputted from a box that outputs the total amount of communication points as the exchange
25 complete information.

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5 The above-described embodiment illustrates a mode in which the first business entity solely provides on-line services. However, it is not necessarily to provide on-line services by a sole provider. In other words, it is possible to provide various on-line services by a plurality of cooperating providers and perform centralized management of the communication points serving as virtual money common to various on-line services by the central unit, and thereby increasing the range of on-line services provided for the customers.

10 Furthermore, although the above-described embodiment illustrates a mode in which an instruction to exchange valuable points for communication points is given after confirming the valuable points, the present invention is not necessarily limited to this mode. In other words, the present invention may be implemented in a mode in which the first and second identification information and the exchange instructing information are transmitted at a time from the customer-use terminal unit to the central unit, and the exchange is immediately performed.

20 As described in detail above, in the point managing method, point managing system, central unit and recording medium of the present invention, since the user can effectively use valuable points by exchanging the valuable points for communication points according to a preset

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exchange rate, it is possible to accelerate the spread of communication points, and consequently the first business entity can obtain new customers and achieve an improvement in the frequency in use of services. Moreover, by
5 introducing a business mode in which the second business entity pays the first business entity the charge for services according to the exchange rate, it is possible for the second business entity to limit the profits derived from the expiration of the term of validity of valuable points on
10 an account book, thereby producing such an advantageous effect that the second business entity does not have disadvantages from the viewpoint of the taxation system.

Furthermore, in the present invention, by performing authentication based on the first identification information given to the customer by the first business entity to ensure
15 safety and then transmitting to the central unit the second identification information given to the customer from the second business entity, it is possible to confirm the status of obtained valuable points corresponding to the second
20 identification information and exchange the valuable points for communication points. It is therefore possible to manage the valuable points unitarily through the central unit, improve the customer's convenience and prevent the valuable points from falling into oblivion.

25 As this invention may be embodied in several forms

without departing from the spirit of essential characteristics thereof, the present embodiment(s) is(are) therefore illustrative and not restrictive, since the scope of the invention is defined by the appended claims rather than by the description preceding them, and all changes that fall within metes and bounds of the claims, or equivalence of such metes and bounds thereof are therefore intended to be embraced by the claims.

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Claims

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1. A point managing method for managing points among a first business entity, a second business entity who cooperates with said first business entity and customers of the first and second business entities, said first business entity managing communication points used for on-line services, said second business entity managing valuable points given to customers as a reward for consumption activity, said method comprising the steps of:

instructing said first business entity by said customer to exchange valuable points for communication points;

requesting said second business entity by said first business entity to send valuable points given to the customer, according to the instruction;

sending requested valuable points by said second business entity to said first business entity; and

exchanging received valuable points for communication points by said first business entity, according to a preset exchange rate.

2. A point managing system comprising a central unit for managing communication points used for on-line services, a cooperate-use terminal unit that is connected to said

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central unit and manages valuable points representing a reward for consumption activity, and a customer-use terminal unit that is connected to said central unit, wherein

said customer-use terminal unit comprises a controller capable of performing the operation of transmitting to said central unit exchange instructing information instructing an exchange of valuable points for communication points,

said central unit comprises:

a communication point database that records

information related to communication points;

~~an exchange database that records~~ information related

to an exchange rate between communication

points and valuable points; and

a controller capable of performing the operation of

transmitting to said cooperate-use terminal

unit valuable point request information

requesting valuable points corresponding to the

customer-use terminal unit according to

received exchange instructing information; and

said cooperate-use terminal unit comprises:

a valuable point database that records information

related to valuable points;

a controller capable of performing the following

operations:

transmitting to said central unit valuable points

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corresponding to received valuable point
request information; and
updating the valuable point database according to the
transmitted valuable points; and
said controller of the central unit further capable
of performing following operations:

exchanging received valuable points for communication
points according to an exchange rate recorded
in said exchange database; and
updating said communication point database according
to the exchanged communication points.

3. The point managing system as set forth in claim 2,
wherein

said controller of the customer-use terminal unit
further capable of performing following operations:

accepting input of first identification information
related to customers and second identification
information that is different from said first
identification information; and
transmitting said first and second identification
information to said central unit;

said controller of the central unit further capable of
performing the following operations:

authenticating said customer-use terminal unit based

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on received first identification information;
and

transmitting received second identification
information to said cooperate-use terminal
unit;

said valuable point database provided in said
cooperate-use terminal unit stores valuable points recorded
to correspond to the second identification information; and

said controller of the cooperate-use terminal unit
further capable of performing the operation of extracting
from the valuable point database valuable points to be
transmitted to said central unit, according to received
second identification information.

4. A central unit connected to a cooperate-use
terminal unit for managing valuable points representing a
reward for consumption activity and a customer-use terminal
unit, for managing communication points used for on-line
services, comprising:

a communication point database that records
information related to communication points;

an exchange database that records information related
to an exchange rate between communication points and
valuable points; and

a controller, coupled to said communication point

database and said exchange database, and capable of performing the following operations:

when exchange instructing information instructing an exchange of valuable points for communication points is received, for transmitting to said cooperate-use terminal unit valuable point request information requesting valuable points corresponding to the customer-use terminal unit according to the received exchange instructing information;

when valuable points corresponding to the transmitted valuable point information are received, for exchanging the received valuable points for communication points according to an exchange rate recorded in said exchange database; and updating said communication point database according to the exchanged communication points.

5. A computer readable recording medium including thereon a recorded computer program for causing a computer having communication means to manage communication points used for on-line services, comprising:

computer readable program code means, when exchange instructing information instructing an exchange of valuable points representing a reward for consumption activity for

communication points is received, for causing a computer to transmit valuable point request information requesting valuable points to said communication means corresponding to the requested valuable points, according to said exchange instructing information; and

computer readable program code means, when valuable points corresponding to the transmitted valuable point request information are received, for causing a computer to exchange the received valuable points for communication points according to a preset exchange rate.

ADD A2
ADD B3

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Declaration and Power of Attorney For Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

下の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

POINT MANAGING METHOD, POINT MANAGING
SYSTEM, CENTRAL UNIT AND RECORDING
MEDIUM

上記発明の明細書（下記の欄でxが1がついていない場合は、本書に添付）は、

the specification of which is attached hereto unless the following box is checked:

☐ 月 日に提出され、米国出願番号または特許協定条約
国際出願番号を _____ とし、
(該当する場合) _____ に訂正されました。

☐ was filed on _____
as United States Application Number or
PCT International Application Number
_____ and was amended on
_____ (if applicable).

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

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Japanese Language Declaration (日本語宣言書)

私は、米国法典第35編119条(a)-(d)項又は365条(b)項に基づき下記の、米国外の国の少なくとも一カ国を指定している特許協力条約365(a)項に基づく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

Prior Foreign Application(s) (for a patent)

外国での先行出願

2000-85057

Japan

(Number)
(番号)

(Country)
(国名)

(Number)
(番号)

(Country)
(国名)

私は、第35編米国法典119条(e)項に基づいて下記の米国外の特許出願規定に記載された権利をここに主張いたします。

(Application No.)
(出願番号)

(Filing Date)
(出願日)

私は、下記の米国法典第35編120条に基づいて下記の米国外の特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)に基づき権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国外の特許出願に開示されていない限り、その先行米国外出願書提出日以降で本出願書の日本国内または特許協力条約国際提出日までの期間中に入手された、連邦規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

(Application No.)
(出願番号)

(Filing Date)
(出願日)

(Application No.)
(出願番号)

(Filing Date)
(出願日)

私は、私自身の知識に基づいて本宣言書中で私が行なう表明が真実であり、かつ私の入手した情報と私の信じていることに基づき表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed

優先権主張なし

24/3/2000

(Day/Month/Year Filed)
(出願年月日)

☐

(Day/Month/Year Filed)
(出願年月日)

☐

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)
(出願番号)

(Filing Date)
(出願日)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、保属中、放棄済)

(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、保属中、放棄済)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Japanese Language Declaration (日本語宣言書)

委任状: 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。(弁理士、または代理人の氏名及び登録番号を明記のこと)

James D. Halsey, Jr., 22,729; Harry John Staas, 22,010; David M. Pitcher, 25,908; John C. Garvey, 28,607; J. Randall Beckers, 30,358; William F. Herbert, 31,024; Richard A. Gollhofer, 31,106; Mark J. Henry, 36,162; Gene M. Garner II, 34,172; Michael D. Stein, 37,240; Paul I. Kravetz, 35,230; Gerald P. Joyce, III, 37,648; Todd E. Marlette, 35,269; Harlan B. Williams, Jr., 34,756; George N. Stevens, 36,938; Michael C. Soldner, 41,455; Norman L. Ourada, 41,235; Kevin R. Spivak, P-43,148; and William M. Schertler, 35,348 (agent)

書頭送付先

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

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Washington, D.C. 20001

直接電話連絡先: (名前及び電話番号)

Direct Telephone Calls to: (name and telephone number)

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唯一または第一発明者名

Full name of sole or first inventor

Hisashi SAKAKIBARA

発明者の署名

日付

Inventor's signature

Date

Hisashi Sakakibara July 17, 2000

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国籍

Citizenship

Japan

私書箱

Post Office Address

c/o AD. KEN Corporation, 3-1-3, Saiwai-cho, Naniwa-ku, Osaka-shi, Osaka 556-0021, JAPAN

第二共同発明者

Full name of second joint inventor, if any

第二共同発明者

日付

Second inventor's signature

Date

住所

Residence

国籍

Citizenship

私書箱

Post Office Address

(第三以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Hisashi SAKAKIBARA

Serial No. To be assigned

Filed: August 4, 2000

Group Art Unit: Unassigned

Examiner: Unassigned

For: POINT MANAGING METHOD, POINT MANAGING SYSTEM, CENTRAL UNIT
AND RECORDING MEDIUM

SUBMISSION OF VERIFIED STATEMENT CLAIMING SMALL ENTITY

Assistant Commissioner
for Patents
Washington, D.C. 20231

Sir:

Attached are Verified Statements Claiming Small Entity Status Under 37 C.F.R.

§§1.9(f) and 1.27(c) by a Small Business Concern.

Respectfully submitted,

STAAS & HALSEY LLP

By:

James D. Halsey, Jr.
Registration No. 22,729

Date: August 4, 2000
700 Eleventh Street, NW
Suite 500
Washington, D.C. 20001
(202) 434-1500

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Applicant or Patentee:

AD. Corporation

Serial or Patent No.:

Docket No.

Filed or Issued:

For: POINT MANAGING METHOD, POINT MANAGING SYSTEM, CENTRAL UNIT AND RECORDING MEDIUM

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) AND 1.27(c).- SMALL BUSINESS CONCERN)

I hereby declare that I am

() the owner of the small business concern identified below:

(X) an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: AD. KEN Corporation

ADDRESS OF CONCERN: 3-1-3, Saiwai-cho, Naniwa-ku, Osaka-shi, Osaka 556-0021, JAPAN

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time, or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled:

POINT MANAGING METHOD, POINT MANAGING SYSTEM, CENTRAL UNIT AND RECORDING MEDIUM

by inventor(s): Hisashi SAKAKIBARA

described in:

(X) the specification filed herewith.

() application serial no. _____, filed _____

() patent no. _____, issued _____

If the rights held by the above-identified small business concern are not exclusive, each individual, concern, or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern, or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME _____

ADDRESS _____

() INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: Hisashi SAKAKIBARA

TITLE OF PERSON OTHER THAN OWNER: President

ADDRESS OF PERSON SIGNING: c/o AD KEN Corporation, Naniwa-ku, Osaka-shi, Osaka, JAPAN

SIGNATURE: Hisashi Sakakibara DATE: July 17, 2000